

RECEIVED
CENTRAL FAX CENTER

Appln. Serial No. 09/272,810
Amendment Dated December 10, 2007
Reply to Ex Parte Quayle Action Mailed October 9, 2007

DEC 10 2007

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Previously Presented) A method comprising:
2 establishing a network connection between a server and an external client, the network
3 connection including a client-to-server channel and a server-to-client channel;
4 receiving at the server a request from the client for a response by the server;
5 before preparing a response to the client request, the server examining local server
6 information to determine whether the client-to-server channel of the network connection with the
7 requesting client is still established; and
8 the server not preparing the response to the client request if the client-to-server channel is
9 determined to be no longer established.
- 1 2. (Currently Amended) The method of claim 1, wherein a state of the server-to-client
2 channel is inferred according to whether the client-to-server channel is still established; and
3 wherein the ~~the~~ server does not prepare the response to the client request if the server-to-client
4 channel is inferred to be closed.
- 1 3. (Original) The method of claim 1, wherein the server includes a read buffer; wherein the
2 client request is read from the read buffer; and wherein the read buffer is then probed to
3 determine whether the client-to-server channel is still established.
- 1 4. (Previously Presented) The method of claim 1, wherein the server maintains local
2 information about the state of the client-to-server channel; wherein a specific state of the client-
3 to-server channel is determined by examining the local information; and wherein the response
4 preparation is aborted if the local information indicates that the client-to-server channel is in the
5 specific state.

Appln. Serial No. 09/272,810

Amendment Dated December 10, 2007

Reply to Ex Parte Quayle Action Mailed October 9, 2007

1 5. (Previously Presented) The method of claim 4, wherein the client-to-server channel is
2 determined to be no longer established if the local information indicates that the client-to-server
3 channel is in a "CLOSE_WAIT" state.

1 6. (Previously Presented) The method of claim 1, wherein the state of the client-to-server
2 channel is determined by polling the local information while a response to the client request is
3 being prepared, whereby upon determination that the client-to-server channel is no longer
4 established the response preparation is aborted before the response is prepared by the server for
5 sending to the client.

1 7. (Previously Presented) The method of claim 1, further comprising:
2 responsive to receiving said request, the server beginning to prepare the response to the
3 requesting client;
4 generating an interrupt on the server when the client-to-server channel is determined to
5 be no longer established; and
6 responsive to said interrupt, the server aborting preparing the response before the
7 response is prepared for sending to the requesting client.

Claims 8-14 (Cancelled).

Appln. Serial No. 09/272,810
Amendment Dated December 10, 2007
Reply to Ex Parte Quayle Action Mailed October 9, 2007

1 15. (Previously Presented) A server comprising:
2 a processing unit;
3 first means for maintaining a queue of connections based on connection requests, each
4 connection communicatively coupling the server with an external client via a communication
5 network, and each connection including a client-to-server channel and a server-to-client channel;
6 second means for accepting connections from the queue;
7 third means for examining local server information to determine whether the client-to-
8 server channel of a given connection from the queue is still established; and
9 fourth means for aborting response preparation if it is determined that the client-to-server
10 channel of the given connection is no longer established.

1 16. (Previously Presented) An article for a server including a processing unit and a network
2 interface card, the article comprising:
3 computer memory; and
4 a server program encoded in the computer memory, the server program commanding the
5 processing unit to
6 (a) accept network connections for communicatively coupling the server with external
7 clients via a communication network, each connection having a client-to-server channel and a
8 server-to-client channel,
9 (b) before a response to a client requesting the response is prepared by the server,
10 examine local server information to determine whether the client-to-server channel of a
11 connection with the requesting client is still established, and
12 (c) abort response preparation if the client-to-server channel of the connection with the
13 requesting client is determined to be no longer established.

1 17. (Previously Presented) The article of claim 16, wherein a state of the server-to-client
2 channel of the connection with the requesting client is inferred according to whether the
3 corresponding client-to-server channel is still established.

Appln. Serial No. 09/272,810
Amendment Dated December 10, 2007
Reply to Ex Parte Quayle Action Mailed October 9, 2007

1 18. (Previously Presented) The article of claim 16, wherein the memory is further encoded
2 with local information about a state of the connection with the requesting client; wherein the
3 state of the connection with the requesting client is determined by examining the local
4 information; and wherein response preparation is aborted if the local information indicates that
5 the client-to-server channel of the connection with the requesting client is in the specific state.

1 19. (Previously Presented) The article of claim 16, wherein a state of the client-to-server
2 channel of the connection with the requesting client is determined by polling the local
3 information, the local information being polled concurrently with the server beginning to prepare
4 the client request.

1 20. (Previously Presented) The article of claim 16, wherein the memory is further encoded
2 with a routine for commanding the processing unit to generate an interrupt when the client-to-
3 server channel of the connection with the requesting client is determined to be no longer
4 established, and wherein responsive to the interrupt the server aborts the response preparation
5 before a response is prepared for sending to the requesting client.

Appln. Serial No. 09/272.810

Amendment Dated December 10, 2007

Reply to Ex Parte Quayle Action Mailed October 9, 2007

1 21. (Previously Presented) A computer program executable by a processing unit, the program
2 comprising instructions stored to computer-readable media, the instructions comprising:
3 instructions for commanding a processing unit of a server computer to maintain a queue
4 of network connections with external clients based on connection requests;
5 instructions for commanding the processing unit to accept connections from the queue;
6 instructions for commanding the processing unit to examine local server information to
7 determine whether a client-to-server channel of an accepted connection from the queue is still
8 established;
9 instructions for commanding the processing unit to process a client request associated
10 with the accepted connection to prepare a response to the client if the client-to-server channel of
11 the accepted connection is first determined as still established; and
12 instructions for commanding the processing unit to forego response preparation for the
13 associated client request if the client-to-server channel of the accepted connection is determined
14 as no longer established.

1 22. (Previously Presented) The method of claim 1 wherein said server is a web server.

1 23. (Previously Presented) The method of claim 22 wherein said response is a web page
2 requested by the requesting client.

Claims 24-25 (Cancelled).

1 26. (Previously Presented) The server of claim 15 wherein said communication network is
2 the Internet.

1 27. (Previously Presented) The server of claim 15 wherein said server is a web server for
2 serving web pages to clients via said communication network.

Appln. Serial No. 09/272,810

Amendment Dated December 10, 2007

Reply to Ex Parte Quayle Action Mailed October 9, 2007

- 1 28. (Previously Presented) The article of claim 16 wherein the communication network is one
2 selected from the group consisting of:
3 a wide area network, a local area network, the Internet.
- 1 29. (Previously Presented) The article of claim 16 wherein the server is a web server.
- 1 30. (Previously Presented) The computer program of claim 21 wherein said server computer
2 is a web server.
- 1 31. (Previously Presented) The computer program of claim 30 wherein said client request is a
2 request for a web page.